REPORT TO CONSUMERS ON 2001

WATER QUALITY

CITY OF MORGAN HILL
CONSUMER CONFIDENCE REPORT

Our Goal:

Meet or Exceed Federal and State Regulations

The City of Morgan Hill is committed to providing the community a safe, reliable supply of excellent quality drinking water that meets or exceeds Federal and State regulations.

This "brochure snapshot" gives information about the quality of water provided in 2001: where your water comes from, what it contains and how it compares to State standards. The City encourages public interest and participation in decisions affecting the community's drinking water.

Report on Any Violations That Have Occurred in the Past Year:

No Violations in 2001

As part of this Consumer Confidence Report, the City is required by the State to report to you, our customers, any violations during the past year. The City is proud to report that once again, there were no reportable violations in 2001.

Este informe contiene informacion muy important sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien. This report contains important information about your community's water quality. If necessary, please have it translated, or speak with a friend who understands it well.

Water Quality: A National Priority

The safety of public water supplies has received much attention in recent years. Our customers can be assured that our water supply is safe and meets or exceeds all drinking water standards. All drinking water -- whether it's tap water or bottled water – comes from natural sources such as rivers, lakes, streams, ponds, reservoirs, springs, and wells. As the water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

An area of considerable publicity has been that regarding concerns and questions about chemicals and organisms (such as viruses, bacteria, and parasites) in municipal water supplies. In this report we'd like to help you understand what some of this public discussion is all about. We'd also like to inform you about the steps the City has taken to ensure that the community's water supply meets the highest standards of safety and quality.

Security of Your Water System

The events of this past September have brought a heightened awareness to communities everywhere of the need to decrease the vulnerability of their water systems to threats, exposure, and vandalism. While Morgan Hill does not have open air water facilities and is therefore less vulnerable to certain threats, we have, nonetheless, added additional security measures that include enhanced security patrols and secondary, remote alarm systems.

A Word About Chemicals and Organisms

Here's a brief description of chemicals and organisms, and how the City of Morgan Hill monitors, tests, and treats for them:

Methyl Tertiary-Butyl Ether (MTBE): Added to gasoline either seasonally or year round in many parts of the United States to increase octane levels and reduce carbon monoxide and ozone levels in the air. In California, it has been added to gasoline since January 1996. The City of Morgan Hill has tested quarterly for MTBE in its 13 wells. No MTBE has been detected.

Lead and Copper Testing: In 1991, the EPA adopted the Lead and Copper Rule which requires all cities, including Morgan Hill, to perform lead and copper testing. The City's public water system does not have detectable levels of lead and copper; however, these metals may leach into the water from home plumbing.

In June of 1997 the City completed Lead and Copper testing from inside homes under the guidance of the Department of Health Services. Results showed that the Copper levels were below the Federal Action Level of 1300 parts per billion (ppb), and the Lead levels were below the Federal Action Level of 15 parts per billion (ppb).

The City is on a three year cycle for testing of Lead and Copper determined by the primary testing performed at the first inception of the Lead and Copper Rule. The City completed its tri-annual sampling in June of 2000.

Nitrates: Nitrates in drinking water at levels above 45 mg/l is a health risk for infants below the age of six months. High nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin.

High nitrate levels may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. Nitrate levels may rise quickly in short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider, or choose to use bottled water for mixing formula and juice for your baby. If you are pregnant, you should drink bottled water.

The City's water supply is below the MCL for nitrates. The City performs an average of 15 separate tests per week for nitrates alone to ensure a safe water supply.

See "CHEMICALS", Page IV

Water Sources:

Morgan Hill is located in South Santa Clara County, situated between the Coyote and Llagas underground aquifers. These aquifers are the source of Morgan Hill's water supply.

The City currently operates 13 deep water wells located throughout the City (Figure1). In 2001, these 13 wells supplied 2,542 million gallons of water for 10,243 homes and businesses in Morgan Hill. After the water comes out of these wells, it is treated with chlorine disinfectant to protect against microbial contaminants.

An assessment of the City's source water is required by the State and will be completed by January 1, 2003.

Water Quality Data:

The table (shown right) lists all the drinking water contaminants that we detected during the 2001 calendar year.

To ensure that tap water is safe to drink, the California Department of Health Services (DOHS) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Morgan Hill's water is treated in accordance with the Department's regulations.

The Department's Food and Drug Branch regulations establish limits for contaminants in bottled water which must provide the same protection for the public. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk.

Unless otherwise noted, the data presented in this table is from testing done over the period January 1 - December 31, 2001. The State allows the City to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Thus, some of the data – though representative of the water quality – is more than a year old.

Water Sampling and Testing:

The annual water sampling required by the State Department of Health Services is as shown below. A total of 1,378 samples are taken each year from the 35 separate sample stations located throughout the City's water distribution system.

Bacteria	446 samples
Nitrate	880 samples
Turbidity	52 samples
Annual Total:	1,378 samples

Monthly bacteria samples are also taken at the 13 water wells from which the community gets its water supply. Additionally, a General Mineral/Physical and Inorganics sample is taken from all water wells once each year even though the Department of Health Services requires this type of sampling only once every three years.

PARAMETER	DATE TESTED	UNITS	MCL	PHG (MCLG)	GROUNDWATER RANGE OF DETECTION LOW	HIGH	AVG.	TYPICAL SOURCE OF CONTAMINANT	EXCEEDED MCL?
PRIMARY STANDARDS - MANDATATED HEALTH RELATED STANDARDS									
CLARITY									
TURBIDITY	2001	NTU	5	N/A	0.10	0.70	0.32	SOIL RUNOFF	NO
ORGANIC CHEMICALS									
TOTAL TRIHALOMETHANES	QUARTERLY 2001	PPB	100	N/A	ND	2.70	1.18	BY-PRODUCT OF DRINKING WATER CHLORINATION	NO
INORGANIC CHEMICALS									
ASBESTOS	1995	MFL	7	(7)	ND	0.7	0.04	INTERNAL CORROSION OF ASBESTOS CEMENT WATER MAINS; EROSION OF NATURAL DEPOSITS	NO
BARIUM	2001	PPM	1	(2)	ND	0.15	0.05	DISCHARGES OF OIL DRILLING WASTES AND FROM METAL REFINERIES; EROSION OF NATURAL DEPOSITS.	NO
CHROMIUM	2001	PPB	50	(100)	4	24	9.5	DISCHARGE FROM STEEL AND PULP MILLS AND CHROME PLATING; EROSION OF NATURAL DEPOSITS	NO
CADMIUM	2001	PPB	5	0.07	ND	1	0.07	INTERNAL CORROSION OF GALVANIZED PIPES; EROSION OF NATURAL DEPOSITS; DISCHARGE FROM ELECTROPLATING AND INDUSTRIAL CHEMICAL FACTORIES, AND FROM METAL REFINERIES; RUNOFF FROM WASTE BATTERIES AND PAINTS	NO
NITRATE (AS NO3)	2001	MG/L	45	45	9	39	26	RUNOFF AND LEACHING FROM FERTILIZER USE; LEACHING FROM SEPTIC TANKS AND SEWAGE; EROSION OF NATURAL DEPOSITS	NO
RADIOACTIVE CONTAMINANTS									
GROSS ALPHA ACTIVITY	QUARTERLY 2001	PCI/L	15	N/A	ND	2.75	.34	EROSION OF NATURAL DEPOSITS	NO
SECONDARY STANDARDS - AESTHETIC STANDARDS									
CHLORIDE	2001	MG/L	500	N/A	23	67	43	RUNOFF/LEACHING FROM NATURAL DEPOSITS; SEAWATER INFLUENCE	NO
SULFATE	2001	MG/L	500	N/A	26	44	36	RUNOFF/LEACHING FROM NATURAL DEPOSITS; INDUSTRIAL WASTES	NO
TOTAL DISSOLVED SOLIDS	2001	MG/L	1000	N/A	290	380	341	RUNOFF/LEACHING FROM NATURAL DEPOSITS	NO
IRON	2001	UG/L	300	N/A	ND	130	9	LEACHING FROM NATURAL DEPOSITS; INDUSTRIAL WASTES	NO
SPECIFIC CONDUCTANCE (E.C.)	2001	UMHO/CM	1,600	N/A	500	680	592	SUBSTANCES THAT FORM IONS WHEN IN WATER; SEA WATER INFLUENCES	NO
COLOR	2001	UNITS	15	N/A	<1	<1	<1	NATURALLY - OCCURRING ORGANIC MATERIALS	NO
FOAMING AGENTS MBAS	2001	UG/L	300	N/A	<50	<50	<50	MUNICIPAL AND INDUSTRIAL WASTE DISCHARGES	NO
ODOR–THRESHOLD	2001	TON	3	N/A	1	1	1	NATURALLY - OCCURRING ORGANIC MATERIALS	NO
SODIUM	2001	PPM	NS	N/A	33	18	27	"SODIUM" REFERS TO THE SALT PRESENT IN THE WATER AND IS GENERALLY NATURALLY OCCURRING.	NS
LIST OF ADDITIONAL CONSTITUENTS ANALYZED									
PH	2001	UNIT	NS		6.9	7.3	7.1	RUNOFF/LEACHING FROM NATURAL DEPOSITS	NS
HARDNESS	2001	PPM	NS		220	360	266	RUNOFF/LEACHING FROM NATURAL DEPOSITS	NS
HARDNESS	2001	GRAINS/GAL	NS		13	21	16	RUNOFF/LEACHING FROM NATURAL DEPOSITS	NS

PARAMETER LEAD AND COPPER	DATE TESTED	UNITS	ACTION LEVEL	PHG (MCLG)	NUMBER OF SITES SAMPLED	HOUSEHOLD RESULTS 90TH PERCENTILE	TYPICAL SOURCE OF CONTAMINANT	ACTION LEVEL EXCEEDED?
LEAD	6/00	PPB	15	2	30	5PPB	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS	NO
COPPER	6/00	PPM	1.3	.17	30	.61PPM	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS	NO

PARAMETER UNREGULATED CHEMICAL	DATE TESTED	UNITS	ACTION LEVEL	PHG (MCLG)	GROUNDWATER RANGE OF DETECTION LOW	HIGH	AVG.	TYPICAL SOURCE OF CONTAMINATION	ACTION LEVEL EXCEEDED?
RADON QUARTERLY	2000	PCI/L	UNREGULATED	NS	459	828	597		NS
PERCHLORATE	2001	PPB	18	NS	ND	6.2	2	MANUFACTURING USE OF LUBRICATING OILS, FABRICS, DYES, RUBBER, PAINTS, FIREWORKS, AND CERTAIN FERTILIZERS	NO

Contaminants that may be present in source water before we treat it:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides, which may come from a variety of sources such as agricultural and residential uses.

Radioactive contaminants, which are naturally occurring.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban runoff, and septic systems.

TERMS & ABBREVIATIONS USED IN THE DATA TABLES

Public Health Goal (PHG):
The level of a contaminant in drinking water below which there is no known or expected risk to health. PHG's are set by the California Environmental Protection Agency.

Maximum Contaminant Level Goal (MCLG):
The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's are set by the U. S. Environmental Protection Agency

Maximum Contaminant Level (MCL):
The highest level of a contaminant that is allowed in drinking water. Primary MCL's are set as close to PHG's or (MCLG's) as is economically and technologically feasible. Secondary MCL's are set to protect the odor, taste, and appearance of drinking water.

Regulatory Action Level (AL)
The concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow

n/a:	not applicable
ns:	no standard
nd:	not detectable at testing limit
ppb:	parts per billion or micrograms per liter
ug/L:	micrograms per liter
ppm:	parts per million or milligrams per liter
mg/L:	milligrams per leter
pCi/l:	picocuries per liter (a measure of radiation)
MFL:	Million Fibers per Liter, with a fiber length greater than 10 micrometers
grains per gallon:	the measure of the concentration of a solution
ton:	a measure of the odor associated with water
umho/cm:	the measure of the dissolved inorganic salt content
<:	less than

Additional information about the content of this report (and additional copies) can be obtained by calling the Public Works Department at (408) 776-7333.

"CHEMICALS", FROM PAGE II

Unregulated Contaminants

The City proactively monitors for unregulated contaminants. This helps the EPA and the California Department of Health Services determine where certain contaminants occur, and whether the contaminants need to be regulated.

Radon: The City tested its source waters for radon on a quarterly basis in 2000. Radon is a radioactive gas that you can't see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundations. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities.

Compared to radon entering the home through the soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause an increased risk of stomach cancer.

If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call your State radon program, or call EPA's Radon Hotline. 1-800-SOS-RADON).

Save Money Water Conservation

Free Water-Wise Kits: Shower Heads, and Faucet Aerators Available

These Water-Wise Kits are a package of information tips and resources from the City of Morgan Hill that can help you save water, both indoors and out. The shower heads and faucet aerators are designed to offer excellent performance while reducing the use of water. To learn more about these free resources, call the City's Environmental Programs Division at 779-7247.

Water System Improvements

The City's water system consists of 13 production wells, 110 miles of water main, 9 pumping stations, and 10 reservoirs. This complex, interrelated system requires 24-hour monitoring and an extensive program of ongoing maintenance. In addition to this, a 5-year capital project program must be constantly updated to plan and fund new capacity and the replacement of outdated infrastructure. Recent improvements to the City's water system include:

- Completed preliminary design for Boy's Ranch and Edmundson reservoirs.
- Drilled test hole for new production well in Boy's Ranch Zone.
- Drilled test hole for replacement of Main production well.
- Accepted contract for design of new SCADA system (computerized system that monitors water reservoir levels and pumping equipment operations throughout the entire water supply system) to improve efficiency and reporting.
- Replaced polybutylene water services in Woodland Acres and Glen Ayre areas.
- Planned replacement of 250 Polybutylene water services in 2002.
- Began study for preliminary design City Water Master Plan.
- Initiated pilot program for water meter radio read in Jackson Oaks Area.